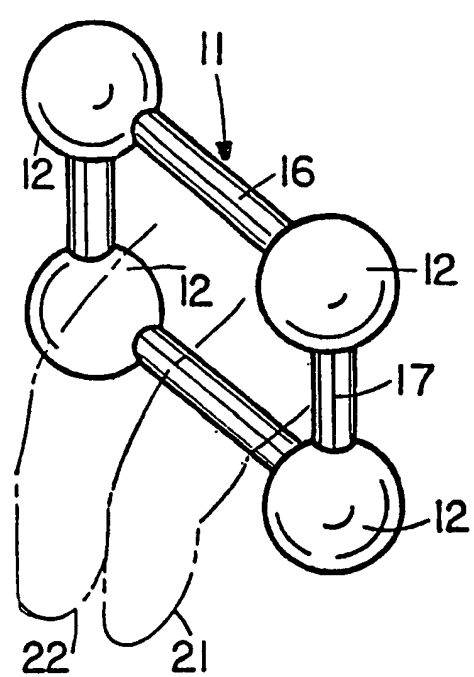




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<p>(21) International Application Number: PCT/US92/01115 (22) International Filing Date: 18 February 1992 (18.02.92) (30) Priority data: 703,417 21 May 1991 (21.05.91) US (71)(72) Applicant and Inventor: SVACINA, Lawrence, M. [US/US]; 2822 Tennyson Street, Denver, CO 80212 (US). (74) Agents: LEWIS, Ancel, W., Jr. et al.; 1720 S. Bellaire Street, Suite 1100, Denver, CO 80222 (US). (81) Designated States: AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, KR, LU (European patent), MC (European patent), NL (European patent), SE (European patent).</p>		<p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>
<p>(54) Title: DEEP PRESSURE MASSAGE DEVICE</p> <p>(57) Abstract</p> <p>A massage device disclosed has a frame portion (11) with a window into which at least the middle (22) and ring fingers (21) will insert for the full extent of the fingers for hand-held movement. At least a pair of laterally spaced outwardly projecting massage portions (12) are rigidly affixed to and project beyond the frame portion (11) so that as the hand is moved over and against the outer surface of a living body the massage portions penetrate the body tissue and perform an effective and efficient deep pressure massage action.</p> 		

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DEEP PRESSURE MASSAGE DEVICE

Technical Field

This invention relates to body massage devices and more particularly to a novel and improved deep
5 pressure massage device for living bodies.

Background Art

A variety of massage devices intended to be hand manipulated over portions of a living body have heretofore been provided for body massaging purposes.

10 Herndon No. 2,633,844 discloses a massage device including four generally spherical massage elements arranged as two pairs for free rotation of the massaging elements together with a gripping handle for the user.

15 Nakayama Nos. 2,836,175 and 3,645,257 and Sekiguchi No. 3,625,204 disclose a massage device with a plurality of spaced, rotatable, massaging elements mounted on a hand-held board.

Lancellotti No. 3,831,592 discloses a trigger
20 point instrument having a pair of spaced massaging elements mounted on upstanding legs.

Disclosure of Invention

A massage device for living bodies disclosed includes a frame portion with a window into which
25 preferably the middle finger and ring finger will slidably insert past the larger knuckles for hand-held movement by the hand of the user and at least one pair of laterally spaced, bulbous massage portions that are affixed to and project outwardly from the frame portion.
30 The device is moved by hand motion with the massage portions contacting and penetrating the muscles of a living body to perform deep pressure massaging.

One embodiment has generally four spherical

bodies of a corresponding size connected in a rectangular configuration by rods. Another embodiment has two sets of generally spherical bodies of different sizes and a third embodiment has only two laterally spaced, bulbous
5 massage portions with spherical contact surfaces.

Brief Description of the Drawings

Details of this invention are described in connection with the accompanying drawings which like parts bear similar reference numerals in which:

10 Figure 1 is a perspective view of a massage device embodying features of the present invention with the middle finger and ring finger of the hand of a user shown in dashed lines.

15 Figure 2 is a front elevational view of the device of Figure 1.

Figure 3 is an end elevational view of the device of Figure 1.

20 Figure 4 is a front elevational view of another embodiment of the present invention having generally spherical bodies of two different sizes.

Figure 5 is an end elevational view of the device of Figure 4.

Figure 6 is a front elevational view of another embodiment of the present invention.

25 Figure 7 is an end elevational view of Figure 6.

Detailed Description

The massage device 11 shown in Figures 1-3 includes four rigid, generally spherical bodies 12 of a
30 corresponding size and shape and each with two radial bore holes 13 and 14 arranged at right angles to one another. A first longer horizontal rigid dowel or dowel-type rod 16 extends between and connects a laterally spaced first set or pair of bodies 12. A similar second

longer horizontal rigid dowel rod 16 extends between and connects a second laterally spaced set or pair of bodies 12. A first shorter rigid dowel rod 17 extends between and connects each of said first set to each of said
5 second set of spherical bodies. End portions of each rod slidably insert into associated of the bore holes 13 and 14 so as to interconnect the bodies to form a rigid assembly of a rectangular configuration defining a rigid frame portion 18 having a central opening or window 19.
10 The spherical bodies 12 are symmetrical with respect to a horizontal center line 25 of the assembly so the assembly is also operable in the same manner when inverted.

In use, the user will typically insert the middle finger 21 and the ring finger 22 into the window
15 19 past the larger finger joints as shown. The spherical bodies form massage portions 12a which are spherical segments extending beyond rod 16 which massage portions contact and penetrate the muscles of the living body to massage the body muscles to perform an effective and
20 efficient deep pressure massaging action.

A satisfactory massage device made according to the present invention had spherical bodies or balls 12 of wood of a diameter of 1 inch (26 mm) and four 5/16 inch diameter dowel rods of wood. The bore holes 13 and 14
25 were of a depth of approximately 7 mm. The shorter dowel rods 17 were 21 mm in length and the longer dowel rods were 42 mm in length. The end portions of the dowel rods were inserted into the bore holes and secured by an adhesive or glue to make a rigid, generally rectangular
30 assembly.

Referring now to Figures 4 and 5 another embodiment of a massage device 31 shown is similar in construction to that above described but has a pair of laterally spaced spherical bodies 37 which are smaller
35 than the first pair 12 of Figures 1-3 to provide the option of having less penetration into the body tissue or

muscle during massaging.

Referring now to Figures 6 and 7 there is shown a third embodiment of a massage device having but a single pair of laterally spaced spherical bodies 12 connected by a rod 16 providing outwardly protruding bulbous massage portions 12a. The frame portion 47 is an inverted U-shaped body having end portions that insert into suitable bore holes in the spherical bodies to form a window 48 for receiving the fingers of the user. The operation of device of Figures 4-7 is the same as that of the device of Figures 1-3.

Although the present invention has been described with a certain degree of particularity, it is understood that the present disclosure has been made by way of example and that changes in details of structure may be made without departing from the spirit thereof.

WHAT IS CLAIMED IS:

1. A massage device comprising:
a frame portion with a window sized for receiving at least the ring finger and middle finger of the hand of the user for being hand-held, and
5 at least one pair of spaced, outwardly projecting, rigid bulbous massage portions rigidly affixed to said frame portion opposite said window for contacting a living body as said massage portions are moved against and penetrate the surface of a living body
10 to perform a deep pressure massaging action.
2. A massage device as set forth in claim 1 wherein said massage portions are generally spherical segments.
3. A massage device as set forth in claim 1 including four spherical bodies each having a pair of bore holes at right angles to one another, said bore holes slidably receiving end portions of four connecting
5 rods to form a rigid assembly arranged in a generally rectangular configuration.
4. A massage device as set forth in claim 3 wherein said spherical bodies are symmetrical with respect to a horizontal center line of said assembly so the device is also operable in the same manner when
5 inverted about said horizontal center line.
5. A massage device as set forth in claim 1 wherein said frame portion and window are generally rectangular.
6. A massage device as set forth in claim 3 wherein two of said spherical bodies on one side of said

center line are of a different size than the other
opposite two of said spherical bodies for different depth
5 of penetration during said massage action.

7. A massage device as set forth in claim 1
wherein said frame portion is generally rectangular and
said massage portions project outwardly at two opposite
corners of said frame portion.

8. A hand-held living body massage device
comprising:

four, rigid, generally spherical bodies
with each said body having two radial bore holes disposed
5 at right angles to one another,

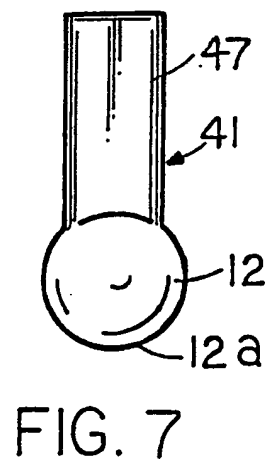
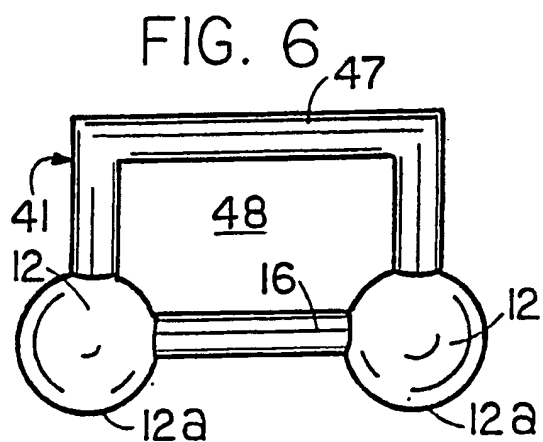
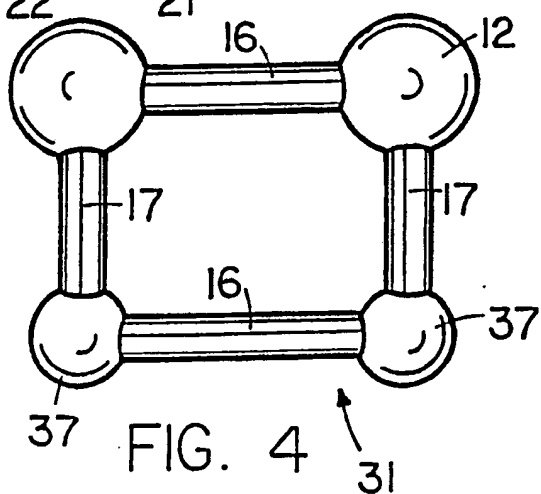
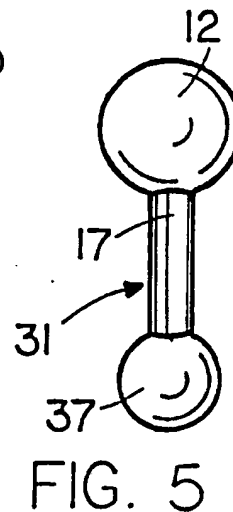
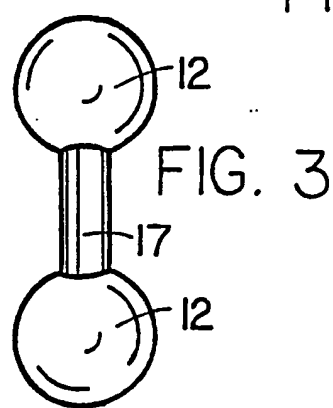
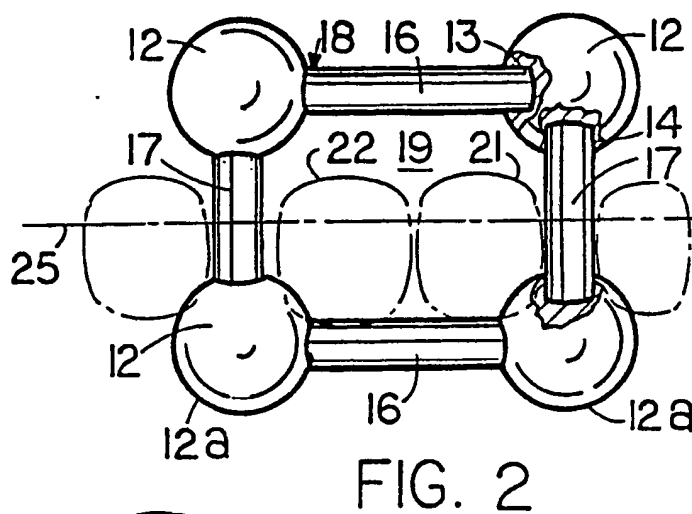
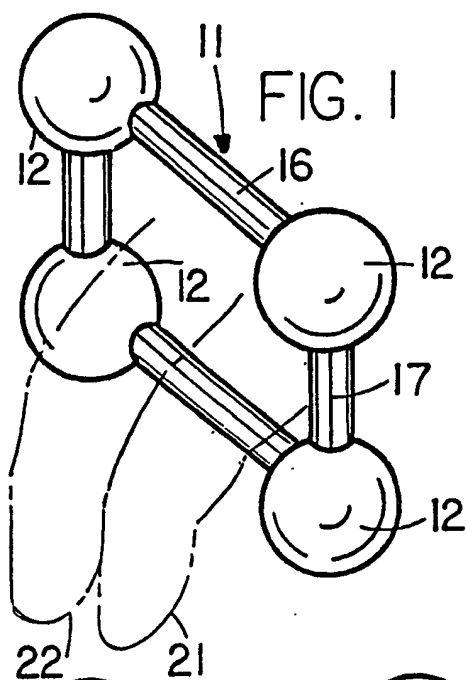
a first longer, rigid dowel-type rod
extending between and connecting a first set of laterally
spaced of said bodies and a second longer, rigid dowel-
type rod extending between and connecting a second set of
10 laterally spaced of said bodies,

a first shorter, rigid dowel-type rod
extending between and connecting said first set of said
bodies and a second shorter, rigid dowel-type rod
extending between and connecting said second set to form
15 a rigid assembly arranged in a rectangular configuration
defining a rigid frame portion with a window into which
the middle finger and the ring finger of a user will
insert past the larger finger joint for being hand-held,
and

20 an outer surface area of a pair of
laterally spaced of said spherical bodies providing
massage portions for contacting and penetrating a living
body as said massage portions are moved against a living
body by moving the hand of a user to perform an effective
25 and efficient deep pressure massaging action on the
muscles and tissue of a living body.

9. A massage device as set forth in claim 1 wherein said bodies and rods are made of wood.

10. A massage device as set forth in claim 1 wherein said spherical bodies have a diameter of about one inch and said dowel rods have a diameter of about 5/16 inch.



INTERNATIONAL SEARCH REPORT

 International application No.
 PCT/US92/01115

A. CLASSIFICATION OF SUBJECT MATTER

IPC(5) : A61H 7/00

US CL : 128/61,60,26; 446/85; 272/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 446/111,122,126,128; 128/59,62R,57; 273/84R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FRANCE, A, 1,332,044 (FRERES), 07 APRIL 1902, See entire document.	1-5,7,8
X Y	US,A, 4,621,622 (BECK), 11 NOVEMBER 1986, See entire document.	1-5,7-9 6,10
Y	US,A, 1,886,544 (HEMP), 08 NOVEMBER 1932, See entire document.	6
A	US,A, 4,577,858 (HIGAMI), 25 MARCH 1986, See entire document.	
A	US,A, 2,633,844 (HERNDON), 08 MAY 1950, See entire document.	
A	Soviet Union, A, 1431-757-A (Feshchenko), 23 October 1988., see entire document.	
A	Great Britain, A, 16,783 (Schaper), 21 October 1899, see entire document.	

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Date of the actual completion of the international search

29 SEPTEMBER 1992

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